## CONSTRUCTION PERMIT

## PERMITTEE

Automotive Robotics Proving Lab (ARPL)

Attn: Ravi Gudapati

5 Altorfer Lane

East Peoria, Illinois 61611

Application No.: 13110047 I.D. No.: 179020ADF

Applicant's Designation: Date Received: November 7, 2013

Construction of: Changes to Engine Test Cells

Date Issued: March 26, 2014

Source Location: 5 Altorfer, East Peoria, Tazewell County

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT emissions source(s) and/or air pollution control equipment consisting of changes to eight existing engine test cells, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit authorizes physical changes to existing engine test cells to enable testing of larger engine generator sets with maximum nominal capacities as follows:
  - i. Test Cells 1, 2 and 3: 4,500 horsepower.
  - ii. Test Cells 4, 5 and 6: 6,000 horsepower.
  - iii. Test Cells 8 and 9: 8,000 horsepower.
  - b. For purposes of this permit, the "affected cells" are the modified engine test cells with the capability to test larger engine generator sets.
- 2a. This permit does not relax or revise operating limits, emission limits or other requirements, including recordkeeping, for the plant and the test cells as established in Section 3 and 4 of Clean Air Act Permit Program (CAAPP) Permit 10090024, which shall now apply to the plant with the affected cells and the affected cells, respectively.
- 3a. This permit is issued based on this project, i.e., modification of the existing cells, not being a major project subject to the requirements of the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. This is because this permit does not provide for increase in permitted operation or emissions of nitrogen oxide (NO $_{\rm x}$ ), carbon monoxide (CO) or greenhouse gasses (GHG) of the plant from the levels established by CAAPP Permit 10090024. In particular:
  - i. Permitted emissions of each regulated PSD pollutant other than GHG from plant, would continue to be less than the major source threshold under the PSD rules, (i.e., less than 250 tons per

- year). In particular, Conditions 4.2(e)(i)(A) and 4.2(d)(i)(A) of Permit 10090024 limits the  $NO_x$  and CO emission of the plant to 180 and 245 tons per year, respectively.
- ii. Permitted emissions of GHG, as carbon dioxide equivalents ( $CO_2e$ ), from plant would continue to be less than the major source threshold under the PSD rules, (i.e., less than 100,000 tons per year). In particular, Condition 3.3(a)(i) of Permit 10090024 limits the GHG emissions of the plant to 19,000 tons per year.
- 4a. Any new stacks for the affected cells shall satisfy good engineering practice, with a height that is at least as great as that specified by 40 CFR 51.100(ii)(2)(ii) or (3).
- b. At all times the Permittee shall, to the extent practicable, maintain and operate the affected cells and associated control equipment in a manner consistent with good air pollution control practices for minimizing emissions.
- 5a. The plant with affected cells shall be operated to comply with limits for GHG emissions in Condition 3.3(a)(i) of CAAPP Permit 10090024.
- b. For emissions of CO and NOx, the affected cells, combined, shall be operated to comply with the emission limit in Conditions 4.2(e)(i)(A) and 4.2(d)(i)(A) of CAAPP Permit 10090024, respectively.
- 6a. This permit does not relieve the Permittee of the responsibility to comply with all Local, State and Federal Regulations which are part of the applicable Illinois State Implementation Plan, as well as all other applicable Federal, State and Local requirements.
- b. In particular, this permit does not excuse the Permittee from the obligation to undertake further actions at the source as may be needed to eliminate air pollution, including noise pollution, such as installing or altering the exhaust silencer system for the affected cells.
- 7. The Permittee may operate the affected cells under this construction permit until such time as a revised operating permit is issued for the source that addresses their capability to test larger engine generator sets. This condition supersedes Standard Condition 6.

If you have any questions on this permit, please contact Minesh Patel at 217/785-1705.

Raymond E. Pilapil	Date Signed:	
Acting Manager, Permit Section Division of Air Pollution Control		

REP:MVP:psj

cc: Region 2